

# QT-16Cr Technical Data Sheet

As supplied, QT-16Cr may contain tube-to-tube welds and is not manufactured as Flash-Free or TRUE-TAPER™. QT-16Cr is manufactured from a nitrogen-strengthened austenitic stainless steel. The chemical requirements of QT-16Cr parent tubing will meet the chemical requirements of UNS S20400.

## Mechanical Properties

Minimum Yield Strength, psi (MPa)	90,000 (621)
Minimum Tensile Strength, psi (MPa)	110,000 (758)
Minimum Elongation	35%
Maximum Hardness	38 HRC

## Technical Data

### Specified

Outside Diameter, D		Wall Thickness, t		Calculated Inside Diameter, d		Plain End Mass, M <sub>pe</sub>		Pipe Metal Cross Sectional Area, A		Pipe Body Yield Load, L <sub>y</sub>		Tensile Load, L <sub>t</sub>		Internal Yield Pressure, P <sub>i</sub>		*Hydro Test Pressure, P <sub>t</sub>		Torsional Yield Strength, T <sub>r</sub>	
in	mm	in	mm	in	mm	lb/ft	kg/m	in <sup>2</sup>	mm <sup>2</sup>	lb	kg	lb	kg	psi	MPa	psi	MPa	ft-lb	N-m
1¼	31.8	0.109	2.8	1.032	26.2	1.330	1.979	0.391	252	35,160	15,950	42,980	19,500	14,980	103	9,600	66.1	890	1,210
1½	38.1	0.109	2.8	1.282	32.5	1.621	2.412	0.476	307	42,870	19,450	52,400	23,770	12,480	86	8,000	55.1	1,340	1,820
1½	38.1	0.145	3.7	1.210	30.7	2.100	3.126	0.617	398	55,530	25,180	67,870	30,780	16,800	115	13,400	68.3	1,650	2,230
1¾	44.5	0.109	2.8	1.532	38.9	1.912	2.846	0.562	362	50,570	22,940	61,810	28,040	10,700	73	6,800	47.2	1,880	2,550
1¾	44.5	0.145	3.7	1.460	37.1	2.488	3.707	0.731	472	65,790	29,830	80,410	36,460	14,400	99	11,500	58.5	2,340	3,170
1¾	44.5	0.188	4.8	1.374	34.9	3.139	4.672	0.923	595	83,030	37,660	101,480	46,030	18,820	129	12,000	83.1	2,820	3,820
2	50.8	0.145	3.7	1.710	43.4	2.875	4.280	0.845	545	76,050	34,480	92,950	42,150	12,600	86	10,000	51.2	3,160	4,280
2	50.8	0.188	4.8	1.624	41.2	3.642	5.420	1.070	690	96,320	43,690	117,720	53,400	16,470	113	10,500	72.7	3,840	5,210
2¾	60.3	0.145	3.7	2.085	52.9	3.457	5.142	1.016	655	91,440	41,460	111,760	50,680	10,610	73	8,400	43.1	4,620	6,260
2¾	60.3	0.188	4.8	1.999	50.7	4.395	6.542	1.292	833	116,250	52,730	142,090	64,450	13,870	95	8,900	61.2	5,670	7,690
2¾	73.0	0.188	4.8	2.499	63.4	5.400	8.037	1.587	1,023	142,830	64,790	174,570	79,180	11,460	79	7,500	51.5	8,670	11,750

**A** Minimum wall thickness is 0.005" (0.13 mm) less than specified wall thickness.

**B** Pressures calculated based on t = 0.005" (0.13 mm).

\* Assumes 64% specified minimum yield strength

**C** Maximum hydrostatic test pressure is 15,000 psi (103 MPa).

**D** Additional diameters and wall thicknesses may be available upon request.

**Disclaimer:** Coiled tubing grades and related information are provided for general information dissemination purposes only. All reasonable efforts were made to ensure the accuracy of all such information, but Quality Tubing makes no representation and gives no warranty with respect to the validity or fitness of such information for any particular customer's coiled tubing operations. The customer acknowledges that any use or interpretation of this information is at his own risk.